DRILL HOLES

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BORDER REV: DATE: June 1, 2004

BY: $USERNAME$

PROPOSED SIGNS

MD 201 (KENILWORTH AVENUE) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

23, 27.31 — OM1-3 18"x18"

25.33 — W11-2(L) 36"x36" — W16-7pL 24"x12"

24.32 — W11-2(R) 36"x36" — W16-7pR 24"x12"

20 — R3-5(L) (30"x36") ONLY

26.35 — R1-2 (36"x36") YIELD

34 — R6-1R (36"x12") ONE WAY

30 — R6-1L (36"x12") ONE WAY

28 — 48"x72" SOUTH MARYLAND 201

29 — 48"x72" NORTH MARYLAND 201

36 — 48"x72" NORTH MARYLAND 201

37 — 48"x72" SOUTH MARYLAND 201

ASSOCIATED SHIELD ASSEMBLIES M1-5(6)

M3-3, M1-5

14p,16p 15p,17p — AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON AND SIGN — R10-3(1) 9"x15"

PUSHBUTTON SIGN NUMBERS INDICATE THE ASSOCIATED PEDESTRIAN SIGNAL HEAD NUMBERS

21.22 — Kenilworth AVE — D-3(1) (16" x VAR.)

INSET 'A' — NTS

18 — Westchester Park DR — D-3(1) (16" x VAR.)

19 — Pontiac ST — D-3(1) (16" x VAR.)

PROPOSED SIGNALS

1.2.5.6 — 12" 12" 12" — a.b.c.d.e.f

9 — R Y G

3.4.7. 8.11-13 — R Y G

10 — R 8" Y 8" G 8" Y 12" G 12"

14-17 — 16" LED COUNTDOWN PEDESTRIAN SIGNAL

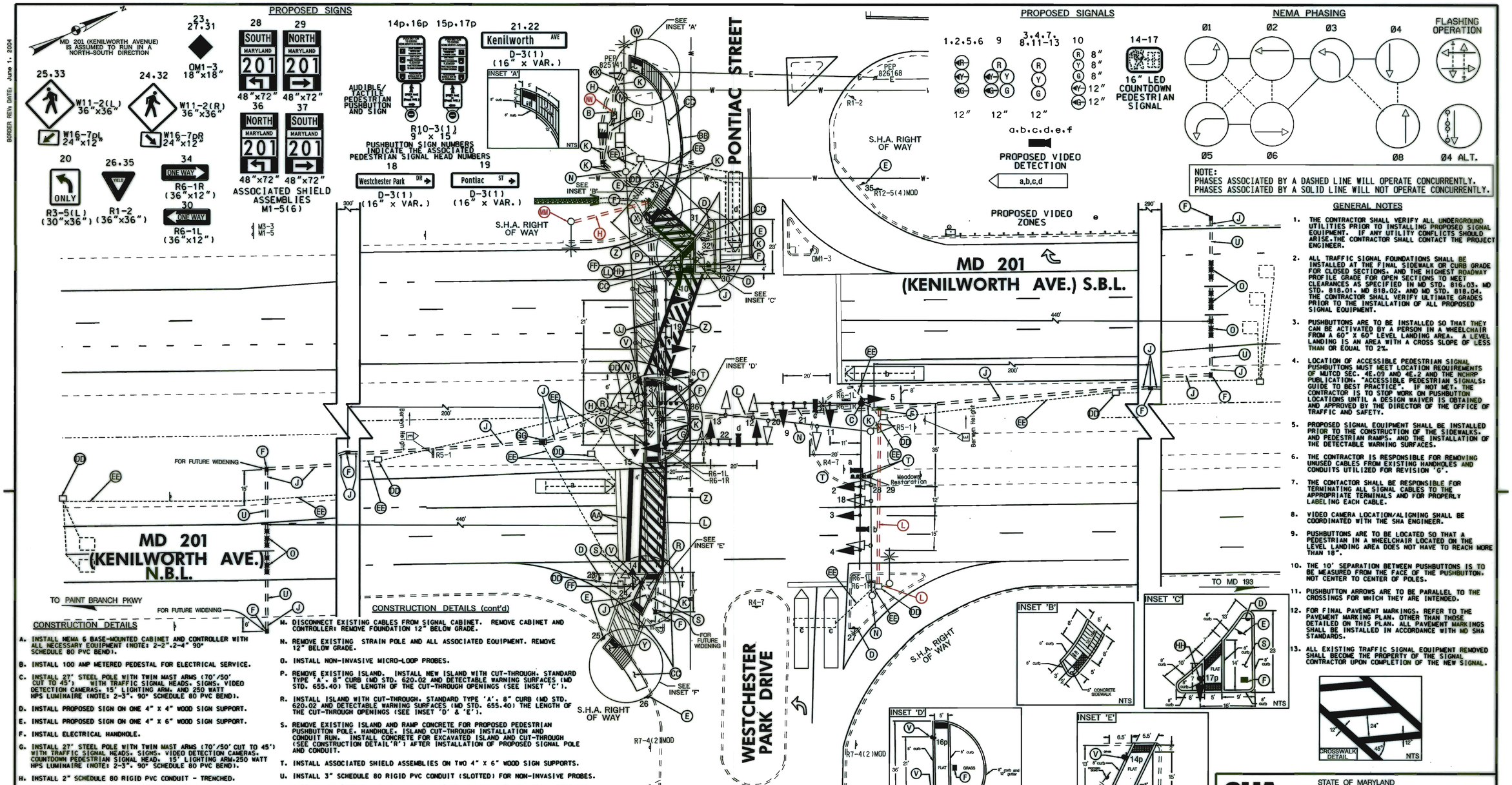
PROPOSED VIDEO DETECTION — a,b,c,d

PROPOSED VIDEO ZONES

NEMA PHASING

FLASHING OPERATION

NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.



GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE.THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
2. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. AND THE HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS TO MEET CLEARANCES AS SPECIFIED IN MD STD. 816.03. MD STD. 818.01. MD 818.02. AND MD STD. 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL PROPOSED SIGNAL EQUIPMENT.
3. PUSHBUTTONS ARE TO BE INSTALLED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60" X 60" LEVEL LANDING AREA. A LEVEL LANDING IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
4. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND 4E.2 AND THE NCHRP PUBLICATION. "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET. THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED AND APPROVED BY THE DIRECTOR OF THE OFFICE OF TRAFFIC AND SAFETY.
5. PROPOSED SIGNAL EQUIPMENT SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF THE SIDEWALKS. AND PEDESTRIAN RAMPS. AND THE INSTALLATION OF THE DETECTABLE WARNING SURFACES.
6. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING UNUSED CABLES FROM EXISTING HANDHOLES AND CONDUITS UTILIZED FOR REVISION 'G'.
7. THE CONTACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND FOR PROPERLY LABELING EACH CABLE.
8. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
9. PUSHBUTTONS ARE TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18".
10. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM THE FACE OF THE PUSHBUTTON. NOT CENTER TO CENTER OF POLES.
11. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSINGS FOR WHICH THEY ARE INTENDED.
12. FOR FINAL PAVEMENT MARKINGS. REFER TO THE PAVEMENT MARKING PLAN. OTHER THAN THOSE DETAILED ON THIS PLAN. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MD SHA STANDARDS.
13. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.

CROSSWALK DETAIL — NTS

CONSTRUCTION DETAILS

A. INSTALL NEMA 6 BASE-MOUNTED CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT (NOTE: 2-2".2-4" 90° SCHEDULE 80 PVC BEND).

B. INSTALL 100 AMP METERED PEDESTAL FOR ELECTRICAL SERVICE.

C. INSTALL 27' STEEL POLE WITH TWIN MAST ARMS (70'/50' CUT TO 45') WITH TRAFFIC SIGNAL HEADS. SIGNS. VIDEO DETECTION CAMERAS. 15' LIGHTING ARM. AND 250 WATT HPS LUMINAIRE (NOTE: 2-3". 90° SCHEDULE 80 PVC BEND).

D. INSTALL PROPOSED SIGN ON ONE 4" X 4" WOOD SIGN SUPPORT.

E. INSTALL PROPOSED SIGN ON ONE 4" X 6" WOOD SIGN SUPPORT.

F. INSTALL ELECTRICAL HANDHOLE.

G. INSTALL 27' STEEL POLE WITH TWIN MAST ARMS (70'/50' CUT TO 45') WITH TRAFFIC SIGNAL HEADS. SIGNS. VIDEO DETECTION CAMERAS. COUNTDOWN PEDESTRIAN SIGNAL HEAD. 15' LIGHTING ARM.250 WATT HPS LUMINAIRE (NOTE: 2-3". 90° SCHEDULE 80 PVC BEND).

H. INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

J. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

K. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.

L. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.

CONSTRUCTION DETAILS (cont'd)

M. DISCONNECT EXISTING CABLES FROM SIGNAL CABINET. REMOVE CABINET AND CONTROLLER: REMOVE FOUNDATION 12" BELOW GRADE.

N. REMOVE EXISTING STRAIN POLE AND ALL ASSOCIATED EQUIPMENT. REMOVE 12" BELOW GRADE.

O. INSTALL NON-INVASIVE MICRO-LOOP PROBES.

P. REMOVE EXISTING ISLAND. INSTALL NEW ISLAND WITH CUT-THROUGH. STANDARD TYPE 'A'. 8" CURB (MD STD. 620.02 AND DETECTABLE WARNING SURFACES (MD STD. 655.40) THE LENGTH OF THE CUT-THROUGH OPENINGS (SEE INSET 'C').

R. INSTALL ISLAND WITH CUT-THROUGH. STANDARD TYPE 'A'. 8" CURB (MD STD. 620.02 AND DETECTABLE WARNING SURFACES (MD STD. 655.40) THE LENGTH OF THE CUT-THROUGH OPENINGS (SEE INSET 'D' & 'E').

S. REMOVE EXISTING ISLAND AND RAMP CONCRETE FOR PROPOSED PEDESTRIAN PUSHBUTTON POLE. HANDHOLE. ISLAND CUT-THROUGH INSTALLATION AND CONDUIT RUN. INSTALL CONCRETE FOR EXCAVATED ISLAND AND CUT-THROUGH (SEE CONSTRUCTION DETAIL 'R') AFTER INSTALLATION OF PROPOSED SIGNAL POLE AND CONDUIT.

T. INSTALL ASSOCIATED SHIELD ASSEMBLIES ON TWO 4" X 6" WOOD SIGN SUPPORTS.

U. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT (SLOTTED) FOR NON-INVASIVE PROBES.

V. INSTALL 10' PEDESTAL POLE ON 18" X 36" FOUNDATION WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD. AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION (NOTE: 1-2" 90° SCHEDULE 80 PVC BEND).

W. INSTALL STANDARD PEDESTRIAN RAMP (MD STD. 655.12). STANDARD TYPE 'A' 8" CURB (MD STD.620.02) AND DETECTABLE WARNING SURFACE (MD STD. 655.40) INSTALLED THE LENGTH OF THE RAMP OPENING (SEE INSET 'A').

X. INSTALL STANDARD PEDESTRIAN RAMP (MD STD. 655.12). STANDARD TYPE 'A' 8" CURB (MD STD.620.02) AND DETECTABLE WARNING SURFACE (MD STD. 655.40) INSTALLED THE LENGTH OF THE RAMP OPENING (SEE INSET 'B').

Y. INSTALL STANDARD PEDESTRIAN RAMP (MD STD. 655.12). STANDARD TYPE 'A' 8" CURB (MD STD.620.02) AND DETECTABLE WARNING SURFACE (MD STD. 655.40) INSTALLED THE LENGTH OF THE RAMP OPENING (SEE INSET 'F').

Z. REMOVE EXISTING CROSSWALK PAVEMENT MARKINGS AND INSTALL 12" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR NEW CROSSWALK AT NEW LOCATION (SEE CROSSWALK DETAIL).

AA. REMOVE EXISTING STOPLINE PAVEMENT MARKINGS AND INSTALL 24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR NEW STOPLINE AT NEW LOCATION.

BB. INSTALL STANDARD TYPE 'A' COMBINATION 8" CURB AND 12" GUTTER PAN (MD STD.620.02).

CONSTRUCTION DETAILS (cont'd)

CC. INSTALL 5" CONCRETE SIDEWALK.
DD. REMOVE HANDHOLE. CAP AND ABANDON CONDUIT.
EE. REMOVE UNUSED WIRING. CAP AND ABANDON CONDUIT.
FF. REMOVE EXISTING PEDESTAL POLE AND ALL ASSOCIATED EQUIPMENT: REMOVE FOUNDATION 12" BELOW GRADE.
GG. USE EXISTING HANDHOLE AND ADJUST TO GRADE WITH NEW FRAME AND COVER.
HH. INSTALL 14' PEDESTAL POLE ON STANDARD BREAKAWAY BASE WITH SIGNAL HEAD. COUNTDOWN PEDESTRIAN SIGNAL HEAD. AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION (NOTE: 1-3" 90° SCHEDULE 80 PVC BEND).
JJ. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
KK. INSTALL 1 CONDUCTOR NO. 2/0 AWG THHN/THWN (ALUMINUM) (THREE RUNS) ELEC. CABLE WITH 30 FEET COIL AT POLE FOR OVERHEAD HOOK UP BY PEPCO.
LL. REMOVE 18"X36" BREAKAWAY COUPLING FOUNDATION AND INSTALL STANDARD FOUNDATION 2'X6' FOR BREAKAWAY BASE AS SHOWN.
MM. INTERCEPT EXISTING CONDUIT BEND. EXTEND CONDUIT TO HANDHOLE.
NN. INSTALL NEW 2 CONDUCTOR TRAY CABLE FOR LUMINAIRE'S AND WIRE INTO SERVICE PEDESTAL.

05/17/2012 [3] REDLINE 3 TEDD APPROVAL
RE-WIRE EXISTING LUMINAIRES TO NEW ELECTRICAL SERVICE PEDESTAL

GEOMETRIC LEGEND
EXISTING
PROPOSED

UTILITY LEGEND
SD SD STORM DRAIN
G G GAS MAIN
W W WATER MAIN
S S SEWER MAIN
E E ELECTRIC CABLES
A A AERIAL CABLES
T T TELEPHONE CABLES
F F FIBER-OPTIC

CENTURY ENGINEERING
CONSULTING ENGINEERS – PLANNERS
10710 GILROY ROAD
HUNT VALLEY, MD 21031
Revision 'G' CEI # 26265.21

APPROVALS
TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR
ORIGINALS ON FILE

REVISIONS

G	TRAFFIC SIGNAL RECONSTRUCTION XX3515168	4/13/11 TIMS NO. K-045				
ENG	JAH	DBD	RDB	MLP	WHTH	
F	INSTALL 6P LT N/B & S/B MD 201 S.H.A. NO. OT-3-90	390				
E	INSTALL PAVEMENT MARK AND PED SIGNALS S.H.A. NO. OT-3-88	588				

PLOTTED: $DATETIME$
FILE: $FILE$

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 201 (KENILWORTH AVENUE) AT
PONTIAC STREET/WESTCHESTER PARK DRIVE
BERWYN, MARYLAND

SIGNALIZATION PLAN SHEET

SCALE 1"=20' ADVERTISED DATE _____ CONTRACT NO. XX3515168

DESIGNED BY DERRICK DICKERSON
DRAWN BY G.B. HARRIS
CHECKED BY _____
F.A.P. NO. _____

COUNTY PRINCE GEORGE'S
LOGMILE 16020106.19
TIMS NO. _____
TOD NO. _____

TS NO. 519G | DRAWING SG-1 OF 2 | SHEET NO. 1 OF 2